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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/467,231 | 12/20/1999 | TOSHIHIKO MUNETSUGU | 32161 | 2093 |

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EXAMINER

NGUYEN, MAIKHANH

| ART UNIT | PAPER NUMBER |
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2176

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 09/467,231 | Applicant(s) MUNETSUGU ET AL. | |
| | Examiner Maikhanh Nguyen | Art Unit 2176 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 83-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 101-104 is/are allowed.
- 6) ☒ Claim(s) 83-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: RCE filed 07/10/2006 to the original application filed 12/20/1999.

Claims 83-104 are currently pending in this application. Claims 1-82 have been canceled.

Claims 83-104 have been added. Claims 83, 92, and 101 are independent claims.

Request Continuation for Examination

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/10/2006 has been entered.

Specification

3. It is noted that applicant has other related applications (e.g., application 10/733,981 filed 12/11/2003 and application 09/785,063 filed 02/16/2001). It is requested that any

related application be referred to in the first sentence of the specification. Applicant is also requested to supply the serial numbers of any other related applications currently pending before the U.S Patent & Trademark Office.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. CIT. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Uogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 C.F.R. ' 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 C.F.R. ' 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 83-104 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-66 of copending

application 10/733,981 (see claims 37-66 as submitted in the amendment filed 03/14/2006). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 83 of the instant application and claim 37 of copending application 10/733,981 both claim *a data processing apparatus for processing media content comprised of a plurality of scenes, the apparatus comprising, an input unit operable to input content description data including: a plurality of importance attributes each associated with one of the segments and having a value representing a degree of contextual importance of the corresponding one of the segments; and an output unit operable to output at least one of the segments based on at least one of the importance attributes*. The difference between claim 83 of the instant application and claim 37 of copending Application No. 10/733,981 is claim 83 of the instant application further claims *the important attributes having a value representing a degree of contextual importance of the corresponding one of the plurality of segments* and claim 37 of copending Application No. 10/733,981 claims *a context attribute having value for describing a context of the media content*. The difference would have been obvious to a person of ordinary skill in the art at the time the invention was made since the claim limitations appear to have been reworded, however, the scope of the invention appears to be generally the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 83-104 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 37-49 of copending application **09/785, 063** (see claims 37-49 as submitted in the amendment filed 02/15/2006). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 83 of the instant application and claim 37 of copending application **09/785, 063** both claim *a data processing apparatus for processing media content comprised of a plurality of scenes, the apparatus comprising, an input unit operable to input content description data including: a context attribute having a value for describing a context of the media content, a plurality of importance attributes each associated with one of the segments and having a value representing a degree of contextual importance of the corresponding one of the segments; and an output unit operable to output at least one of the segments based on at least one of the importance attributes*. Furthermore, the differences between claim 83 of the instant application and claim 37 of copending application **09/785, 063** would have been obvious to a person of ordinary skill in the art at the time the invention was made, since claim 37 of the instant application represents the invention in broader scope. The claim limitations appear to have been reworded, however, the scope of the invention appears to be generally the same.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 83-84, 86-93, and 95-100 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Smith et al.** "*Video Skimming and Characterization through the Combination of Image and Language Understanding Techniques*", June 1997, pp. 775-781.

As to claims 83 and 92:

Smith teaches a data processing apparatus and method for processing media content (*e.g., video*) comprised of a plurality of scenes (*e.g., video sequences are separated into scenes*) [see the discussion beginning at section 2, p. 776], the apparatus comprising:

- an input unit operable to input content description data (*e.g., text in the video provides significant information as to content of a scene*) including a plurality of

segments (*e.g., segments*) each for describing one of the plurality of scenes of media content (*e.g., a scene will often contain recognizable humans, as well as captioned text to describe the scene*), the content description data also including a plurality of importance attributes each associated with a corresponding one of the plurality of segments (*e.g., identifying the most significant words in a given scene...detection of objects of importance*) [see pp.776-779; see also, Fig.6, p.780]; and

- an output unit operable to output at least one of the segments based on at least one of the importance attributes (*e.g., extract the significant audio and video information and create a “skim” video which represents a very short synopsis of the original/display only the video pertaining to a segment’s content ... The amount of content displayed should be adjustable so the user can view as much or as little video as needed, from extremely compact to full-length video*) [see the Abstract; section 1.1; see also, Fig. 7, p. 781).

Smith, does not specifically teach “a value representing a degree of contextual importance”. However, Smith’s teaching “*with prioritized video frames from each scene, we now have a suitable representation for combining the image and audio skims for the final skim*” (see section 3.3) would suggest the claimed “a value representing a degree of contextual importance.”

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include Smith's teaching for *"a value representing a degree of contextual importance"* because it would have provided the capability for identifying the most significant segments in a video and effectively browsing the segments in a short time without losing the content of the video.

As to claims 84 and 93:

Wherein the content description data further includes a plurality of time attributes each associated with one of the plurality of segments for determining a start time and one of an end time and a duration of the one of the plurality of segments in relation to the media content (*see section 3.3*).

As to claims 86 and 96:

Smith teaches the content description data includes supplemental information (*e.g., the amount of content displayed should be adjustable so the user can view as much or as little video as needed; see section 1.1*).

As to claims 87 and 96:

Smith teaches the media content corresponds to video data and/or audio data (*e.g., video information as well as audio information; see Abstract & section 1.1*).

As to claims 88 and 97:

Smith teaches each of the plurality of segments is provided with linkage information for linking to dominant data that represents the segment (*see Abstract*).

As to claims 89 and 98:

Smith teaches the dominant data is one or more of text data, image data and audio data (*e.g., the audio portion; section 1.1 & audio and images embedded within the video; section 1.2*).

As to claims 90 and 99:

Smith teaches the context description data is previously generated outside of the data processing apparatus prior the inputting (*see section 3.2*).

As to claims 91 and 100:

Smith teaches the output unit is operable to output in response to a user query regarding the context (*e.g., the relevant portions of video for the segments related to their query; section 1.1*).

7. Claims 85 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Smith et al.** in view of **Yeo et al.** (U.S. 5,821,945 – issued 10/13/1998).

As to claims 85 and 94:

Smith does not specifically teach “*the plurality of segments are hierarchically described.*”

Yeo teaches the plurality of segments are hierarchically described (*e.g., a hierarchical view of the video provides an effective means for browsing the video content, since long sequences of related shots can be telescoped into a small number of key frames which represent the repeatedly appearing shots in the scene; col. 2, lines 35-48*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Yeo and Smith because Yeo’s teaching would have allowed users to recognize the underlying story structure and navigate to the desired point in the video.

Indication of Allowable Subject Matter

8. Claims 101-104 appear to be allowable over the prior art of record, subject to the obviousness-type double patenting rejection detailed above, and subject to a final search.

Response to Arguments

9. Applicants' arguments filed 07/10/2006 have been fully considered but are moot in view of the new ground(s) rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Yeo et al. U.S. Pat. No. 5,821,945 Issued: Oct. 13, 1998
- Boreczky, J., et al., "*Comparison of Video Shot Boundary Detection Techniques*," in Proceedings of the SPIE Conference on Storage and Retrieval for Still Image and Video Databases IV, San Jose, CA, February 1996, pp. 1-10.
- Lienhart, R., et al., "*Video Abstracting*," Communication of ACM, December 1997, pp. 1-12.
- Zhang, H., et al., "*Video Parsing, Retrieval and Browsing: An Integrated and Content-Based Solution*," ACM Multimedia 95- Electronic Proceedings, November 5-9, 1995, California, pp. 1-19.

Contact information

Art Unit: 2176

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maikhanh Nguyen whose telephone number is (571) 272-4093. The examiner can normally be reached on Monday - Friday from 9:00am – 5:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached at (571) 272-4136.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

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MN


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